STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

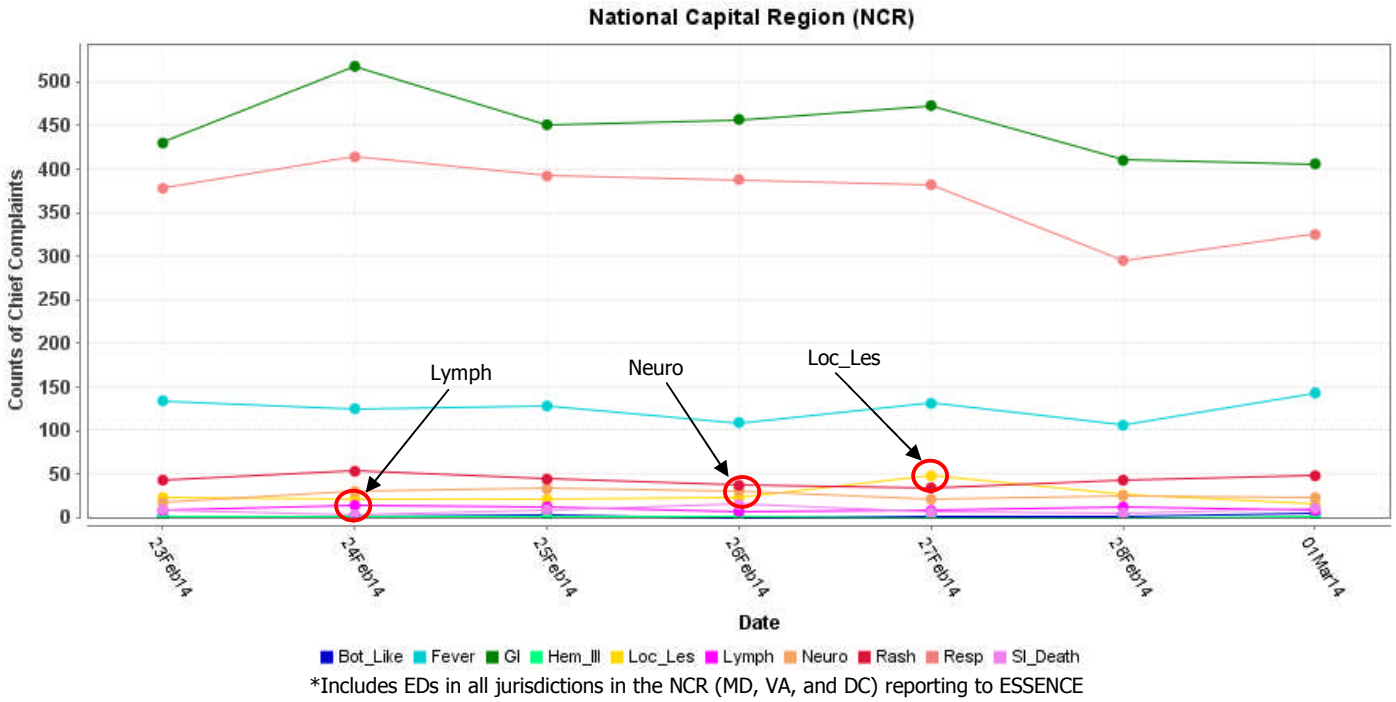
March 7, 2014

Public Health & Emergency Preparedness Bulletin: # 2014:09
Reporting for the week ending 03/01/14 (MMWR Week #09)

CURRENT HOMELAND SECURITY THREAT LEVELS

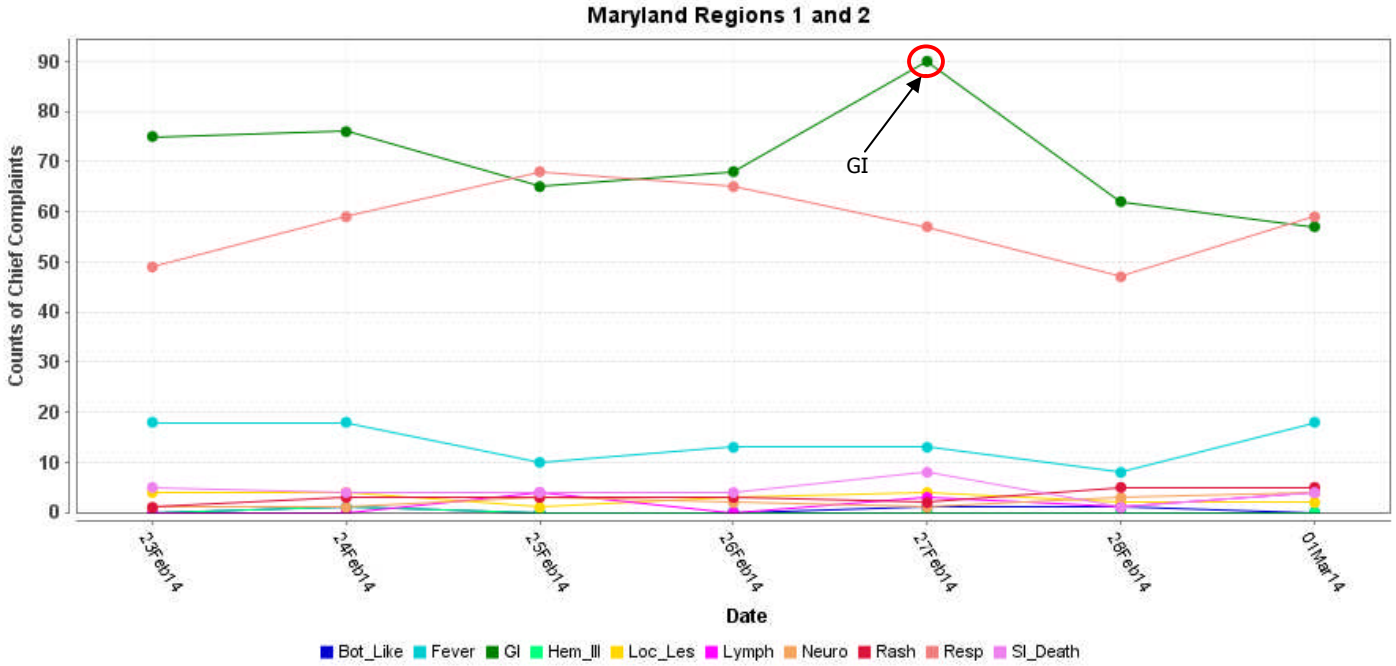
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

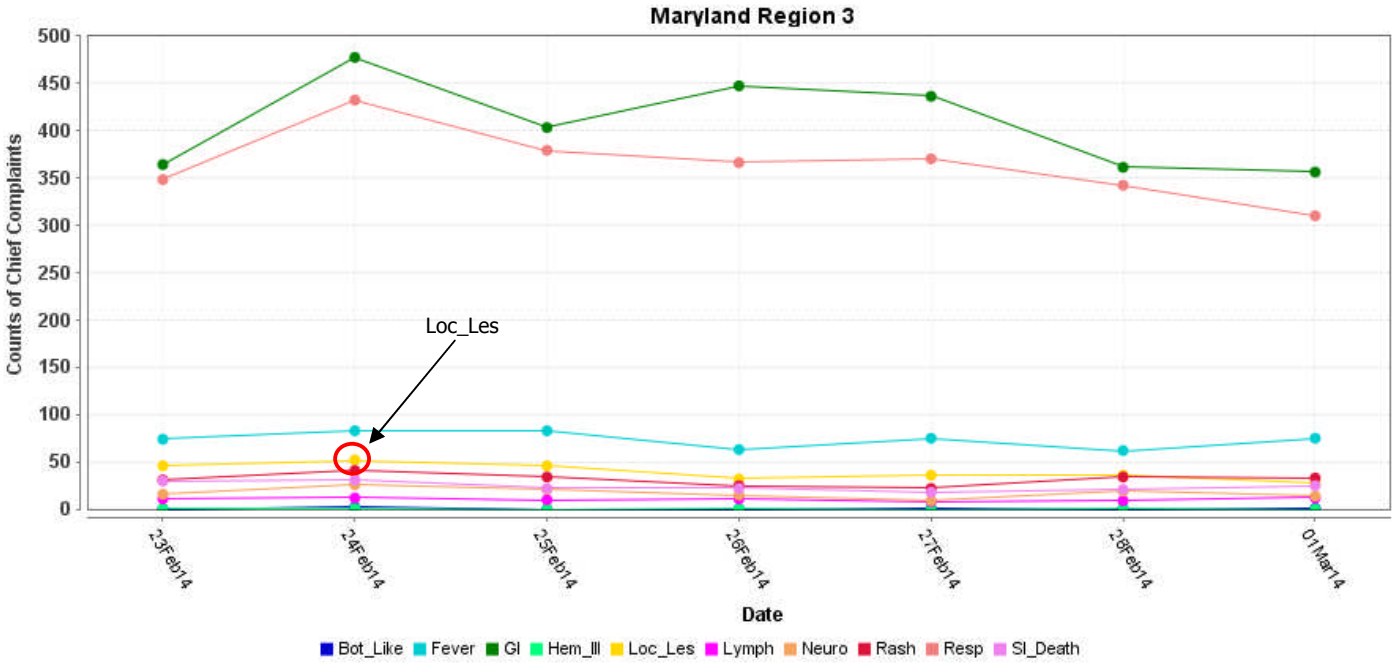


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

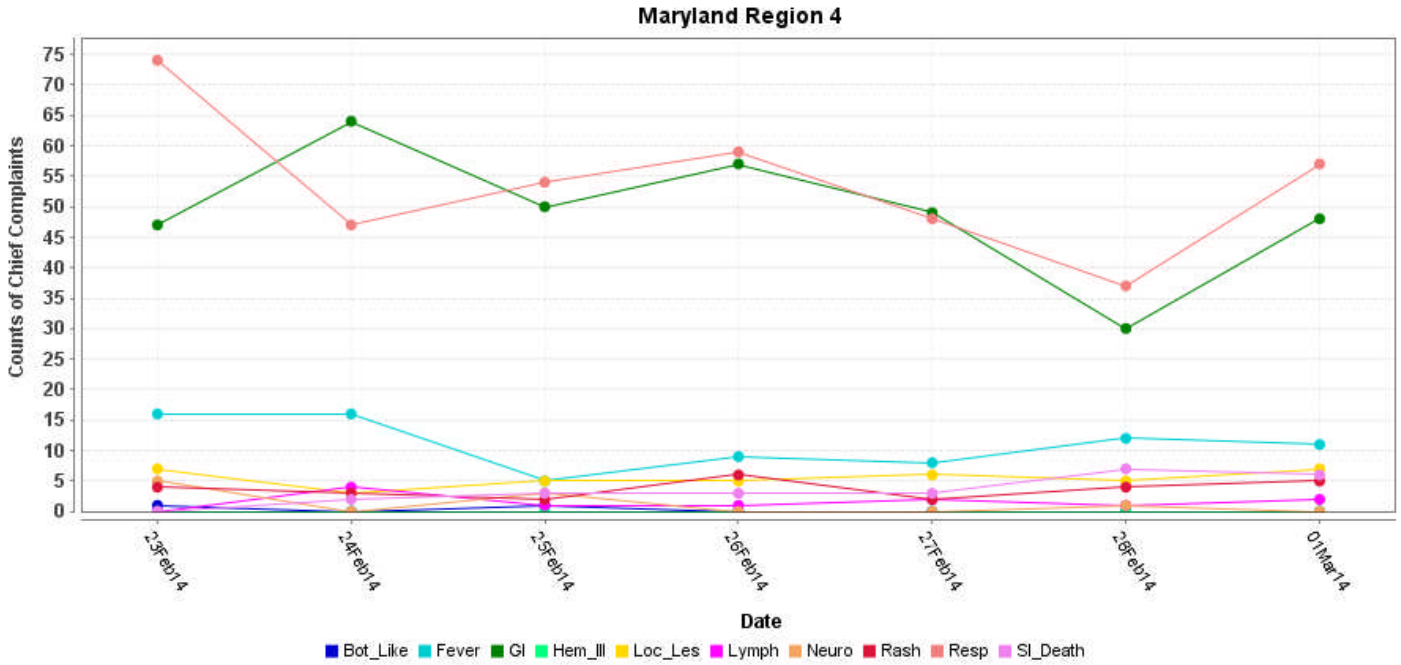
MARYLAND ESSENCE:



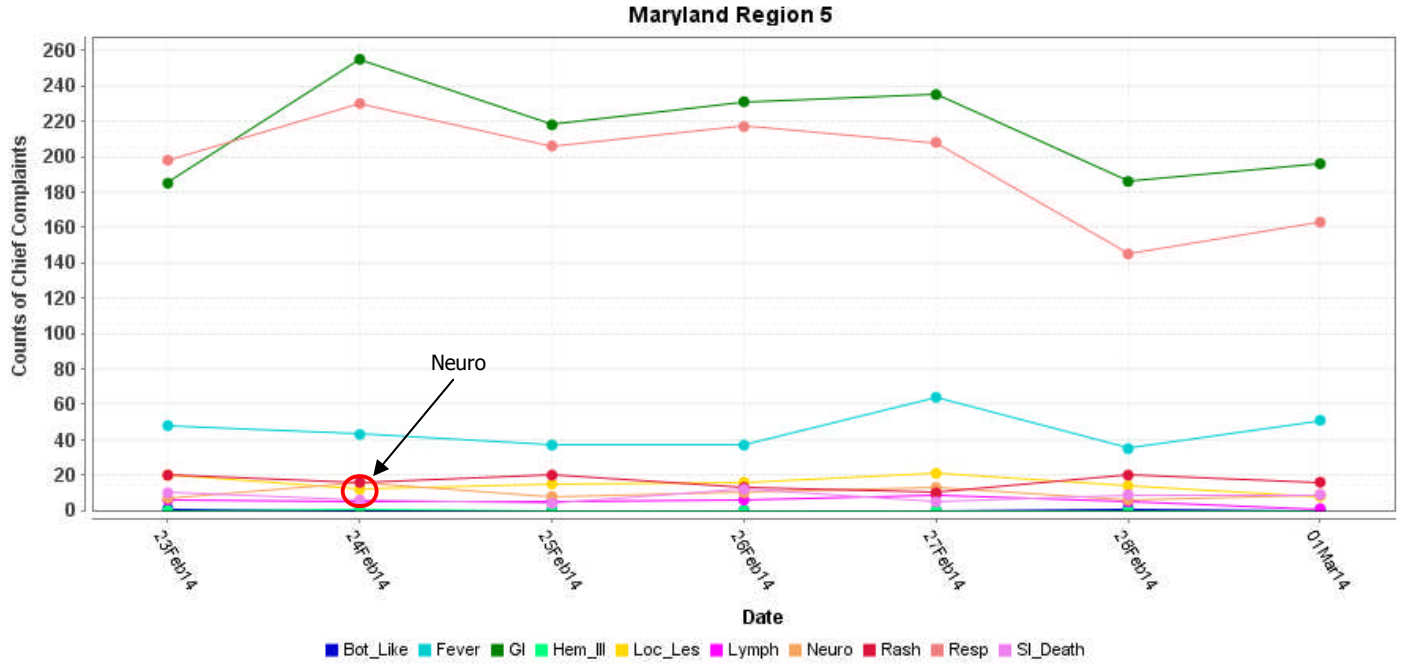
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



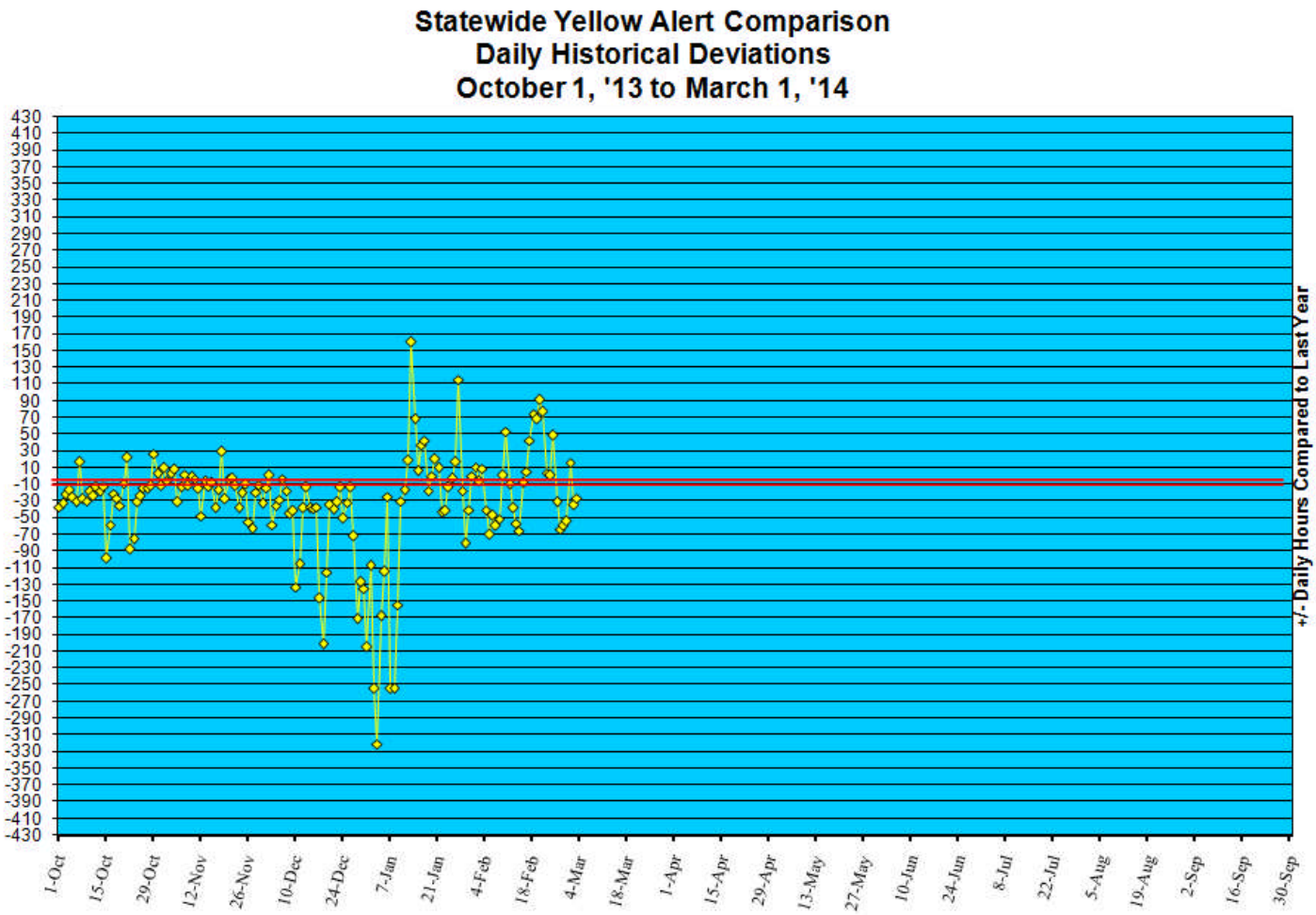
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in January 2014 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (February 23 - March 1, 2014):	7	0
Prior week (February 16 - February 22, 2014):	7	0
Week#09, 2013 (February 24 - March 2, 2014):	7	0

10 outbreaks were reported to DHMH during MMWR Week 09 (February 23-March 1, 2014)

6 Gastroenteritis Outbreaks
4 outbreaks of GASTROENTERITIS in Nursing Homes
1 outbreak of GASTROENTERITIS in an Assisted Living Facility
1 outbreak of GASTROENTERITIS associated with a Day Program

3 Respiratory Illness Outbreaks
1 outbreak of INFLUENZA associated with a Day Program
1 outbreak of INFLUENZA associated with a School
1 outbreak of PNEUMONIA in an Assisted Living Facility

1 Other Outbreak
1 outbreak of PHARYNGITIS associated with a Daycare Center

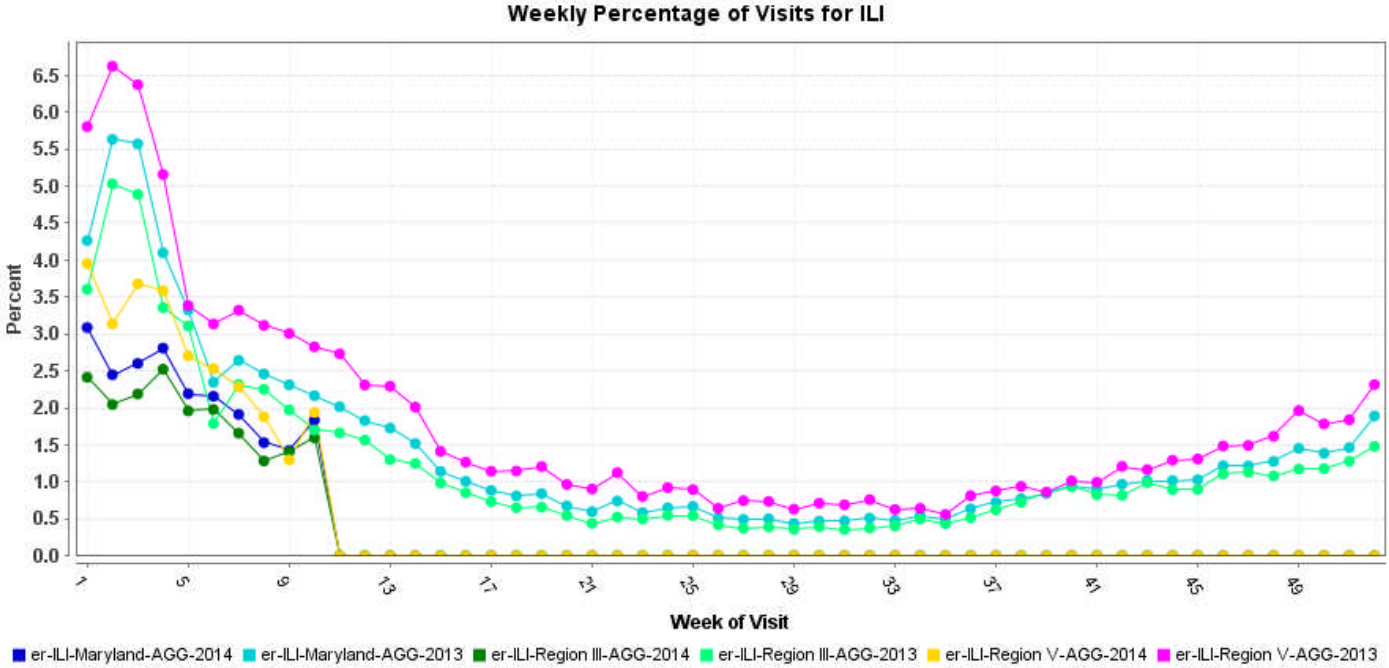
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 9 was: Widespread with Minimal Intensity.

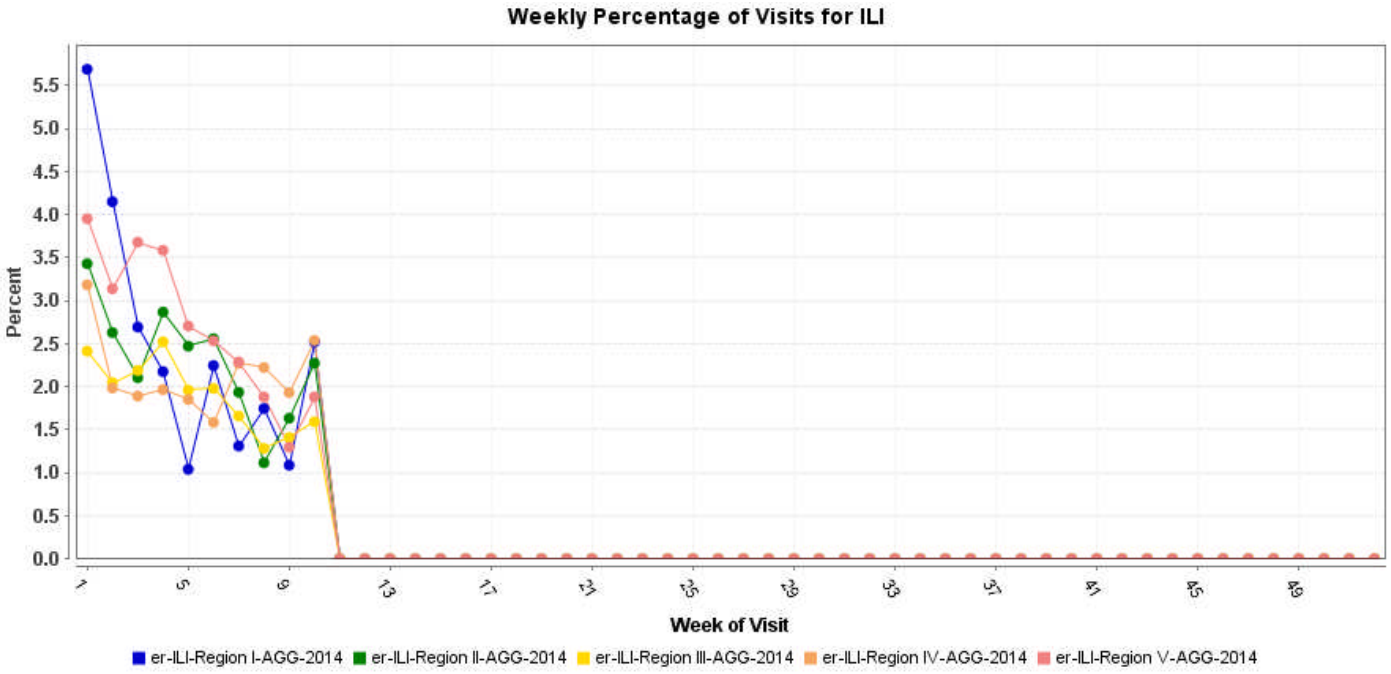
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



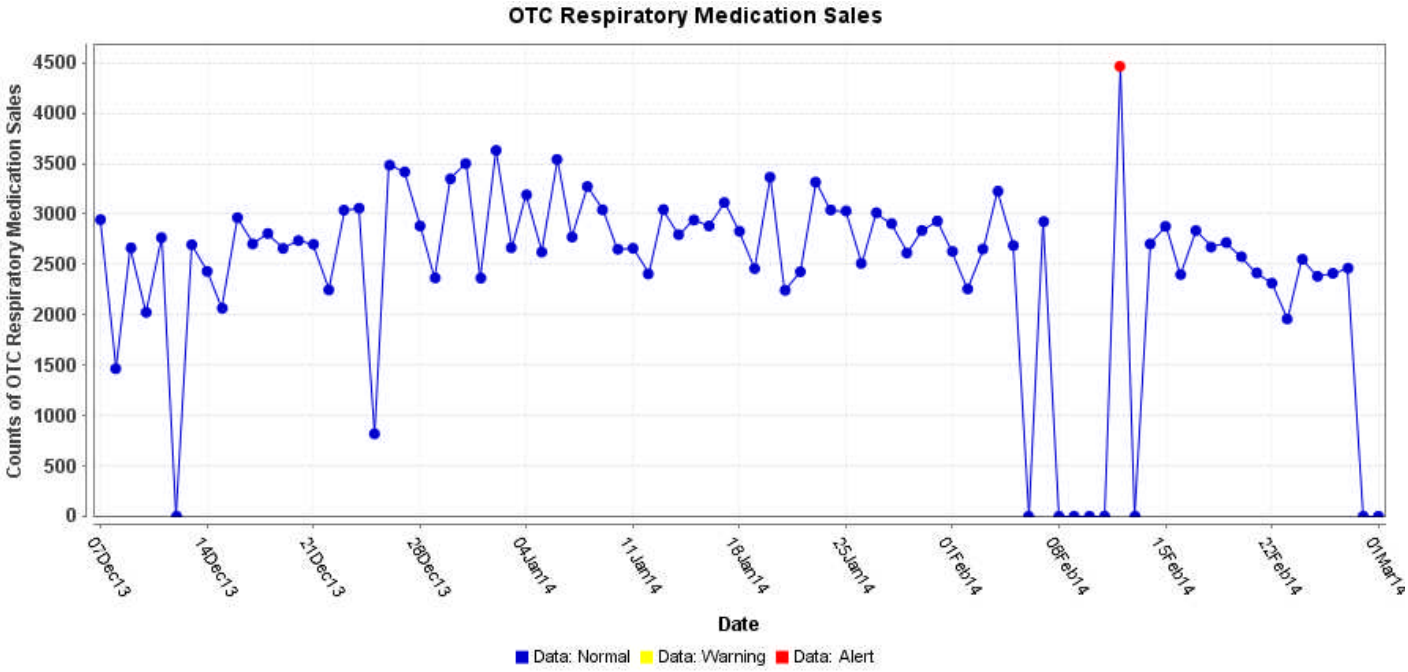
* Includes 2013 and 2014 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2014 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2014, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA (H7N9): Another 2 cases of H7N9 influenza were reported in China today [26 Feb 2014], including the 1st one from Zhejiang province in 2 weeks, as health groups weighed in with risk assessment updates and experts from China suggested a new way to get a jump on H7N9 and other novel viruses. The newly confirmed infection from Zhejiang province, which last reported a case on 12 Feb 2014, involves a 2-year-old girl who is hospitalized with a mild illness, according to a provincial health department statement translated and posted by FluTrackers, an infectious disease news message board. Zhejiang province has the most H7N9 cases of any in China and has played a pivotal role in both outbreak waves. The other new case involves a 65-year-old woman from Guangdong province who is hospitalized in critical condition, according to an official statement translated by FluTrackers. The new cases lift the 2-wave H7N9 outbreak total to 373, with 114 as the unofficial number of deaths. So far 237 illnesses have been detected in the outbreak's 2nd wave, which began in October, compared with 136 in the 1st wave last spring.

NATIONAL DISEASE REPORTS*

There were no national disease reports for MMWR Week 9.

INTERNATIONAL DISEASE REPORTS*

MERS-COV (SAUDI ARABIA): 28 February 2014, On [3 and 15 Feb 2014], the Ministry of Health of Saudi Arabia announced 2 additional laboratory-confirmed cases of Middle East respiratory syndrome coronavirus (MERS-CoV) infection. Details of the cases provided to WHO are as follows: A 22-year-old man from the Eastern Region. He became ill on [3 Feb 2014] and was hospitalised on [9 Feb 2014] and died on [12 Feb 2014]. The patient had an underlying medical condition. He had no reported history of contact with animals or a previously laboratory-confirmed case. A 67-year-old man from Riyadh. He became ill on [23 Jan 2014] and was hospitalised on [25 Jan 2014]. The patient had an underlying medical condition. He had no reported history of contact with animals or with a previously laboratory-confirmed case. Globally, from September 2012 to date [28 Feb 2014], WHO has been informed of a total of 184 laboratory-confirmed cases of infection with MERS-CoV, including 80 deaths. (Emerging Infectious Diseases are listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

LISTERIOSIS (SWEDEN): 26 February 2014, Sweden's Public Health Agency has declared a specific outbreak of listeriosis during the final 3 months of 2013, with 41 sickened compared to 25 for the same period the year before. "There was a clear increase, which led us to suspect that this was an outbreak, and therefore we decided to investigate the matter immediately," says Viktor Dahl with the Public Health Agency. While previous *Listeria* outbreaks have largely been linked to smoked or pickled salmon, investigators suspect cold cuts in the latest increase. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

E. COLI EHEC (UNITED KINGDOM): 24 February 2014, Last September 2013, an outbreak of enterohemorrhagic Escherichia coli (EHEC) was linked to watercress, although the underlying cause was uncertain. By looking at a 2nd outbreak, researchers have found that EHEC was transferred from a neighboring cattle field near to the watercress farm, either through wildlife entering the watercress or run-off water. Between 30 Aug 2013 and 19 Sep 2013, 19 cases across England, Wales, and Scotland were reported. Despite trace-back investigations, microbiological testing of watercress, and environmental sampling at farms, the source of contamination of the watercress remains unclear. Another 2 cases were retrospectively identified in February 2013. One had consumed watercress and one pre-packaged salad, both from retailers representing a different supply chain, suggesting that the contamination is unlikely to have occurred at the farms. Following restocking of watercress at the supermarket chain, an additional case was reported with an onset date of 21 Oct 2013. The case reported consuming bagged mixed salad containing watercress from that supermarket. No further cases of the outbreak profile have been reported. The watercress supplier is working with the Food Standards Agency to review their policies and procedures in light of the outbreaks, while the Gastrointestinal, Emerging and Zoonotic Infections department are remaining vigilant for any new cases of the 2 outbreak strains or clusters of EHEC cases reporting watercress consumption. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Zachary Faigen, MSPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-6745
Fax: 410-333-5000
Email: Zachary.Faigen@maryland.gov

Anikah H. Salim, MPH, CPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-2074
Fax: 410-333-5000
Email: Anikah.Salim@maryland.gov

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable